

IN THE CLAIMS

This is a complete and current listing of the claims, marked with status identifiers in parentheses. The following listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A method for coding a structured, ~~in particular XML based,~~ document, comprising:

generating with which a plurality of codes are ~~generated by means of using one or more at least one name space~~ ~~(NS1 .. NS4)~~ and allocated allocating the plurality of codes for types defined by means of name spaces ~~(NS1 .. NS4),~~ with which

carrying out, for each name space, an assignment to further name spaces ~~is carried out~~ such that at least one assignment information item ~~(NAMESPACE_ID, TYPECODE)~~ is generated such that at least one inheritance relationship ~~(BT1 .. BT3)~~ is described between an inheriting name space ~~(NS2)~~ and bequeathing name spaces ~~(NS1, NS3, NS4),~~ characterized in that; and

forming
the assignment information of the inheriting name space ~~(NS2)~~ ~~is formed from a list of codes (TYPECODES) of the basic types (LBT, LBT')~~ of header types ~~(HT)~~ of the inheriting name space, with basic types ~~(LBT, LBT')~~ being types, from which the header type ~~(HT)~~ originates directly ~~(LBT)~~ or from which a header type ~~(HT')~~ originates, which in turn is the basic type of a header type ~~(HT)~~ of the inheriting name space ~~(NS2)~~ ~~(LBT')~~.

2. (Currently Amended) The method as claimed in claim 1, wherein
~~characterized in that~~

the basis of an inheritance relationship ~~{BT1...BT3}~~ between the name spaces ~~{NS1...NS4}~~ and the inheritance relationships in a name space of the basic type ~~{OBT}~~ and the inheritance relationships in the name space of the subset ~~{TM}~~.

3. (Currently Amended) The method as claimed in claim 2, ~~characterized in that~~
wherein the addressable subset ~~{TM}~~ is determined based on an initial basic type ~~{OBT}~~ by establishing the basic types ~~{LBT, LBT'}~~ of the bequeathing name space ~~{NS1}~~.

4. (Currently Amended) The method as claimed in claim 3, ~~characterized in that~~wherein, -
a) ~~based on the initial basic type {OBT} for determining the subset {TM}, header types {HT} are determined in the inheriting name space {NS2}, for which basic types {LBT, LBT'}~~ are identified from the bequeathing name space ~~{NS1}~~ by means use of the assignment information {NAMESPACE_ID, TYPECODE},
b) ~~the initial basic type {OBT} is being a basic type of the basic types {LBT, LBT'} of the bequeathing name space {NS1}.~~

5. (Currently Amended) The method as claimed in ~~one of the preceding claims,~~
~~characterized in that~~claim 1, wherein -
the assignment information ~~{NAMESPACE_ID, TYPECODE}~~ assigned to the inheriting name spaces ~~{NS2}~~ is stored together with the respective name space ~~{NS2}~~ in a first device carrying out at least one of the coding and/or decoding.

6. (Currently Amended) The method as claimed in claim 5, wherein
~~characterized in that~~
the assignment information ~~{NAMESPACE_ID, TYPECODE}~~ assigned

to the inheriting name spaces ~~(NS2)~~ is generated in a second device and transmitted together with the respective name space ~~(NS1, NS2)~~, in a first device carrying out at least one of the coding and/or decoding.

7. (Currently Amended) The method as claimed in ~~one of the preceding claims,~~
~~characterized in that~~ claim 1, wherein
respectively separate codes, which are independent of at least one of other schemas and/or name spaces, for the elements at least one of defined and/or declared in at least one of the schemas, ~~and/or~~ name spaces, and/or in the groups of at least one of schemas ~~and/or~~ and name spaces, are allocated for at least one of a schema, ~~and/or~~ a name space and/or for a group of at least one of schemas and/or name spaces.

8. (Currently Amended) The method as claimed in claim 7, ~~with which~~ wherein, to identify the at least one of schema, ~~and/or~~ name space and/or the group of at least one of ~~schemas~~ and/or name spaces, the separate codes are sub-divided into corresponding address areas.

9. (Currently Amended) The method as claimed in ~~one of~~ claims 7 ~~to 8~~, ~~with which~~ wherein the separate codes respectively comprise a local code at least one of relating to at least one of the schema and/or the name space and/or relating to at least one of the group of schemas and/or name spaces and an identification code to identify at least one of the schema, ~~and/or~~ name space and/or the group of at least one of schemas ~~and/or~~ name spaces.

10. (Currently Amended) The method as claimed in ~~one of~~ claims 7 ~~to 9~~, ~~with which~~ wherein separate codes are generated

for at least one of global elements, ~~and/or~~ substitution groups ~~and/or~~ data types.

11. (Currently Amended) The method as claimed in claim 10, ~~with which~~wherein separate codes are generated for data types type codes such that within the inheritance tree of a name space, the data type adjacent to a first data type in the same name space is at a code interval in respect of the first data type, said code interval corresponding to the number of data types derived from the first data type in this name space.

12. (Currently Amended) The method as claimed in ~~one of~~ claims 7 ~~to 11~~, ~~with which~~wherein the separate codes within a given name space are allocated according to a method comprising, ~~which comprises the following steps:~~
— ~~in a first step~~ sorting all data types of a name space, which were bequeathed from data types of other name spaces, ~~are sorted~~ in a list in the sequence of global type codes of the respective basic data types as defined in the MPEG-7 standard, the basic data types being the data types in other name spaces, from which the sorted data types were bequeathed;
— ~~in a second step~~ sorting ~~these~~ data types of a name space, which were bequeathed from a specific basic data type of a specific other name space, ~~are sorted~~ lexicographically in each instance;
— ~~in a third step~~ sorting all the data types of a name space, which were not bequeathed from a data type of another name space, ~~are sorted~~ according to the sequence defined in the MPEG-7 standard into the existing list of data types; and
— ~~in a fourth step~~ allocating the separate codes ~~are allocated~~ in list sequence to the data types of the name space.

13. (Currently Amended) A method for decoding a structured document, comprising: decoding in particular an XML-based document, the method being configured such that a document previously coded according to a method as claimed in one of the preceding claims~~claim 1 is decoded.~~

14. (Currently Amended) A method for decoding a structured document, comprising: decoding a document previously coded according to a method as claimed in claim 11~~The method as claimed in claim 13 for decoding a document coded according to the method as claimed in claim 11, with which, wherein, to decode a binary type code, the code length of the separate codes of the binary type codes is determined from the number of derived data types.~~

15. (Currently Amended) A method for decoding a structured document, comprising: decoding a document previously coded according to a method as claimed in claim~~The method as claimed in claim 13 or 14 for decoding a document coded according to the method as claimed in claim 4, with which~~wherein, to decode a specific type code, the sub-tree of the inheritance tree of the name space, in which the specific type code is located, is determined from the code intervals between adjacent data types.

16. (Currently Amended) A method for decoding an XML-based document, comprising: decoding a document previously coded according to a method as claimed in claim 1~~A method for decoding a structured document, in particular an XML-based document, the method being configured such that a document coded according to a method as claimed in one of the preceding claims is decoded.~~

17. (Currently Amended) A method for decoding an XML-based document, comprising: decoding a document previously coded according to a method as claimed in claim ~~The method as claimed in claim 16 for decoding a document coded according to the method as claimed in claim 11, with which~~ wherein, to decode a binary type code, the code length of the separate codes of the binary type codes is determined from the number of derived data types.

18. (Currently Amended) A method for decoding an XML-based document, comprising: decoding a document previously coded according to a method as claimed in claim ~~The method as claimed in claim 16 or 17 for decoding a document coded according to the method as claimed in claim 11, with which~~ wherein, to decode a specific type code, the sub-tree of the inheritance tree of the name space, in which the specific type code is located, code length is determined from the code intervals between adjacent data types.

19. (Currently Amended) A method for decoding an XML-based document, comprising: decoding a document previously coded according to a method as claimed in claim ~~The method as claimed in claim 16 to 18 for decoding a document coded according to the method as claimed in claim 11, with which~~ wherein, to determine the basic types ~~(LBT, LBT')~~, which originate from an initial basic type, code length ~~(OBT)~~ ~~{lacuna}~~ is determined from the code intervals between adjacent data types.

20. (Currently Amended) A method for decoding an XML-based document, comprising: decoding a document previously coded according to a method as claimed in claim ~~The method as claimed in claim 16 to 19 for decoding a document coded~~

~~according to the method as claimed in claim 11, with~~
~~which~~wherein, to determine the number of types in the subset, code length ~~TM [lacuna]~~ is determined based on the header types ~~(HT)~~ from the code intervals between adjacent header types ~~(HT)~~.

21. (Currently Amended) A coding device, ~~which is~~ configured ~~such that~~ to implement a coding method as claimed in claim 1 ~~one of claims 1 to 12 can be implemented.~~

22. (Currently Amended) A decoding device, ~~which is~~ configured ~~such that~~ to implement a decoding method as claimed in ~~one of claims 13 to 20 can be implemented.~~

23. (Currently Amended) A coding and decoding device comprising a coding device as claimed in claim 21 ~~and a decoding device as claimed in claim 22.~~

24. (Cancelled)

25. (New) A method as claimed in claim 1, for coding an XML-based document.

26. (New) A method as claimed in claim 13, for decoding an XML-based document.

27. (New) A coding and decoding device comprising a decoding device as claimed in claim 22.